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APPLICATION NO.	FIL	ING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,584	1+	0/20/2003	Jianwei Liu	146712004700	2455
50268	7590	05/31/2005		EXAMINER	
SEAGATE TECHNOLOGY c/o MOFO NOVA 1650 TYSONS BOULEVARD				RESAN, STEVAN A	
SUITE 300	NS BOOLE	CVARD		ART UNIT	PAPER NUMBER
MCLEAN,	VA 22102	2		1773	

DATE MAILED: 05/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)						
	10/687,584	LIU ET AL.	•					
Office Action Summary	Examiner	Art Unit						
•	Stevan A. Resan	1773						
The MAIL ING DATE of this communication an			idrass					
Period for Reply	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).								
Status								
1) Responsive to communication(s) filed on								
•	s action is non-final.							
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims								
4)⊠ Claim(s) <u>11 and 13-19</u> is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.								
5) Claim(s) is/are allowed.								
6)⊠ Claim(s) <u>11 and 13-19</u> is/are rejected.								
7) Claim(s) is/are objected to.								
8) Claim(s) are subject to restriction and/	8) Claim(s) are subject to restriction and/or election requirement.							
Application Papers								
9)☐ The specification is objected to by the Examiner.								
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11)☐ The oath or declaration is objected to by the E	xaminer. Note the attached Office	Action or form P	ΓO-152.					
Priority under 35 U.S.C. § 119								
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 								
Attachment(s)	□ □ · · · •	(0.7.5. 4.45)						
1) Untice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date								
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date			O-152)					

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1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 11 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakakawaji et al US 5,820,964. See embodiment 3.

Claim 12 was inadvertently omitted from this rejection in the previous office action; the examiner apologizes for any inconvenience.

The examiner does not consider the limitation from claim 12 (now incorporated into Claim 11) to distinguish over the art since the additive that is bonded in Nakakawaji et al embodiment 3 would not be phase separated since the additive and lubricant of Nakakawaji et al are deemed initially compatible (i.e. not phase separated in the unbonded state because of their close cohesive energy density due to their close chemical structures) and would therefore remain compatible (i.e. not phase separated) after bonding.

3. Claims 11,13-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ng US 5128216 in view of Yanagisawa US 4849305 and Falcone et al US 6080486 for the reasons of record.

Note, as pointed out in the prior office action, that Ng teaches that the "another lubricant" that may overcoat the amphiphilic compound may be a **compatible** fluorocarbon oil. The examiner broadly interprets this as excluding fluorocarbon oils that would be phase separated from the amphiphilic compound.

4. The terminal disclaimer filed 4 March 2005 is accepted and the rejection under the judicially created doctrine of obvious double patenting is withdrawn.

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5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stevan A. Resan whose telephone number is 571-272-1513. The examiner can normally be reached on Tues-Thurs from 7:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney, can be reached at 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

STEVAN A. RÉSAN PRIMARY EXAMINER